



# POLYMAC 2008 AGENDA

Sandia National Laboratories - Livermore, CA  
June 17-19, 2008

## Tuesday, June 17, 2008

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8:30-9:00 Badging, Registration, Coffee

### **Session 1 Chair: Linda Domeier**

9:00 "KCRIMS - Status of the Kansas City Plant Transformation" **Erich Grotheer** (KCP)

9:25 "Weapon Headspace Organics" **Chris A. Harvey** (LLNL)

9:50 "Polyolefin-Coated Cantilever Arrays for Real-Time Surveillance of Stockpile-Relevant Vapor Signatures" **Al Loui** (LLNL)

10:15 "SPME Analysis of Polyurethane Elastomers" **Linda Domeier** (SNL/CA), LeRoy Whinnery, Pat Keifer, Chris Harvey

10:40 Break

### **Session 2 Chair: Cindy Sandoval**

11:00 "Oxidation of Isotopically Labeled Nylon Characterized by Mass Spectrometry" **James Hochrein** (SNL/NM)

11:25 "Volatile Evolution from a Poly(ethylenevinylacetate) System" Paul Morrell, David Netherton, Andree Maclean, **Julian Murphy** (AWE)

11:50 "Strategies and Frameworks - Getting Value for Money from University Outreach" Gary Burnell, Chris Lord and **Norman Godfrey** (AWE)

12:15 Lunch (pizza)

### **Session 3 Chair: Dan Bowen**

1:15 "Approaches Toward the Synthesis of Carborane Containing Elastomers" **Peter Beavis** (AWE) Tony Swain, Mogon Patel

1:40 "Boron Cage Compound Nanocomposites Systems Based on Silicone and VCE Elastomers" **Eric Eastwood** (KCP)

2:05 "Boron Cage Compound Nanocomposites Based on Epoxies and Urethanes" **Dan Bowen** (KCP)

- 2:30 "Polysiloxanes Containing Carboranes as Physics Property Modifiers"  
**Mogon Patel** (AWE), Paul Morrell, Tony Swain, Jenny Cunningham,  
Peter Beavis, Julian Murphy
- 2:55 Break
- Session 4 Chair: Norman Godfrey**
- 3:15 "Development of Gated Processes for Product Development: Dealing  
with New Technology Development and Insertion" **Julian Murphy**  
(AWE)
- 3:40 "Aqueous Gels for Blast and Aerosol Mitigation" **Andrew Vance**  
(SNL/CA), Will Wentz, Mike Foley, Tim Shepodd, Linda Domeier, John  
Hachman
- 4:05 "General Discussion Topics" **All** (LeRoy Whinnery will lead discussion)
- 5:30-7:00 Bocce at [Campo di Bocce / Livermore](#)
- 7:00 Dinner at [Campo di Bocce / Livermore](#)

### Wednesday, June 18, 2008

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- 8:00-8:35 Coffee
- Session 5 Chair: Sarah Chinn**
- 8:35 "If You Can't Buy It, You May Have to Make It Yourself (Using  
Synthetic Chemistry to Investigate Replacement Materials Issues)"  
**Norman Godfrey** (AWE)
- 9:00 "Constitutive Modeling of Radiation Effects on the Permanent Set in a  
Silicone Elastomer" **A. Maiti** (LLNL), R. H. Gee, T. Weisgraber, S.  
Chinn, and R. S. Maxwell
- 9:25 "A Mesoscopic Network Model for Permanent Set in Crosslinked  
Elastomers" **T.H. Weisgraber** (LLNL), R.H. Gee, A. Maiti, S. Chinn,  
R.S. Maxwell
- 9:50 "Radiation Induced Degradation of Toughened Silicone Rubber TR55"  
**Cindy Alviso** (LLNL), Sarah Chinn, Robert Maxwell, Tom Wilson, Chris  
Harvey, Rebecca Cohenour
- 10:15 Break

**Session 6     Chair: Mogan Patel**

- 10:35        "How Not to Make Your Bonds Weak (Factors Affecting the Peel Strength Performance of Pressure Sensitive Silicone Adhesive)" Julie Etheridge, Kath Ford, **Norman Godfrey** (AWE)
- 11:00        "Control of Microstructure and Density in Foamed Polysiloxanes" **Mogon Patel** (AWE), Peter Jenkins, Julian Murphy, Paul Morrell, Tony Swain
- 11:25        "Stress-Sensing Polysiloxane Materials" **Peter Beavis** (AWE), Mogon Patel, Anthony Swain, David Roberts, Simon Holder, Jon Meegan
- 11:50        "An Investigation into the Material Properties of Polyurethane Elastomer Mouldings" Sarra Boyd, presented by **Norman Godfrey** (AWE)
- 12:15        Lunch (sandwiches)

**Session 7     Chair: Andy Vance**

- 1:15        "Development of High Char Foam Encapsulation Materials" **Mat Celina** (SNL/NM), Jim Aubert, Ken Erickson, Ana Trujillo, Nick Giron, Ed Russick
- 1:40        "Removable Foam Aging and Reliability Study for a System Upgrade: Update of Recent Activity" " **Ed Russick** SNL/NM), Jim Aubert, Sarah Leming
- 2:05        "Process Improvements and Scale-up of RER1 Bismaleimide (BMI)" **Mark Wilson** (KCP)
- 2:30        "Foam Mechanical Characterization and Model Validation" **Wei-Yang Lu** (SNL/CA), Mike Neilsen, Helena Jin, and Soonsung Hong
- 2:55        Break

**Session 8     Chair: Jim Aubert**

- 3:15        "Synthesis of Alkyne-Containing Materials for Incorporation into Organic Hydrogen Scavengers" **Anthony C Swain** (AWE), Chris Entwistle
- 3:40        "Development of a Getter Sensor" **Ward Small** (LLNL), Duncan Maitland, Jane Bearinger, Steve Letts, Jim Trebes
- 4:05        "Development and Manufacturing of AFT-2 OBA Optical Gantry Beam" **David A Calkins** (SNL/NM) and Kevin Schmidt

Free evening to enjoy the Bay Area

## Thursday, June 19, 2008

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8:30-9:00 Coffee

### **Session 9 Chair: LeRoy Whinnery**

9:00 "Production of Monolithic Components from Polyethylene" **Anthony Swain** (AWE), Niaz Khan

9:25 "Material Morphology and Electrical Resistivity in EPDM Gaskets" **Linda Domeier** (SNL/CA) and Nancy Yang

9:50 "Fabrication of the Second Stage Conduit Cable for the STARS Program" **Rex Jaramillo** (SNL/NM), Joanetta Bruhn

10:15 Break

10:40 "Bulk Mechanical Properties of Wilethane 44 Urethane Adhesive" **Seth Gleiman** (LANL)

11:05 "Redevelopment of a Quality Assurance Test for Wilethane 44 Urethane Adhesive" **Seth Gleiman** (LANL)

Adjourn

Business Meeting - TBD

For more information, contact:

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